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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,831	09/22/2000	Douglas W. Walker	135555-0262	2423

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EXAMINER

DAVIS, DANIEL J

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/668,831

Applicant(s)

WALKER ET AL.

Examiner

D. Jacob Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, 7, 8 and 11 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 3,550,280 to Palm in view of U.S. Patent No. 4,823,244 to Alaybayoglu et al.

Illustrated in Fig. 10, Palm discloses a handpiece 16 having a tool supporting end and a battery receiving end. Best illustrated in Figs. 1-2, the battery receiving end has an alignment post with circular electrical contacts 96 and 97 concentric to the post. The embodiment of Fig. 10 uses a battery pack 123 to drive the motor. The battery pack 123 is connected to a handpiece 16 in the same manner as unit 17 in the embodiment of Figs. 1-2. Best illustrated in Figs. 1-2, Palm discloses a unit 17 (for which the battery pack 123 is substituted in Fig. 10) having circular electrical contacts 36, 37, 41, and 42 concentric with the alignment post. The contacts 36, 37, 41 and 42 "are lockingly and conductively interengaged" with the contacts 96a and 97a of handpiece 16 "upon engagement of the alignment post with the central opening and in response to rotation of the battery pack [123] relative to the handpiece [16]." As the battery pack 123 and

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the handpiece 123 are rotated into position relative to one another, spring-supported contact 97a snaps into position, and inherently makes an audible noise once proper contact is achieved. The battery pack 123 further comprises a central opening through which the alignment post is positioned. As illustrated in Fig. 10, the handpiece 16 has flat end surfaces 76 which abut against flat surfaces of the battery pack. The flat surfaces of the battery pack are the surfaces of element 126.

Palm discloses the use of a rechargeable battery pack. However, the battery pack inherently could be used only once and then discarded. In this sense, it may be referred to as a "single use" or "disposable" battery pack. In the alternative, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a non-rechargeable or "single use" battery pack since it is well known that single use, disposable" batteries include "higher energy capacity per volume," "higher energy capacity per weight," higher reliability," and "may be entered in the normal waste stream." Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a "single use, disposable battery pack" for the aforementioned reasons.

Palm's clippers may be considered a surgical tool. It is well known that tools intended for commercial use may also be used in surgery. A screwdriver sold in a hardware store may be used to insert a screw in bone, just as it may insert a screw in wood. A saw may be used to cut bone just it can cut wood. And a drill may bore a hole in a bone as it can bore a hole in wood. Likewise, Palm's clippers may be used in a

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surgical procedure just as they may be used to cut hair outside of surgery. Therefore, Palm's clippers may be considered a surgical instrument.

Since Palm's device is a surgical instrument, it absolutely, unequivocally, must be sterilized to prevent infection. However, sterilizing takes time away from an end user. So, Alaybayoglu teaches the use of a sterile container and battery pack, obviating the need of an end user to sterilize the battery pack before each surgical use. See col. 1, lines 59-68. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a single use sterile container for a battery pack, instead of a rechargeable battery pack, as taught by Alaybayoglu, in order to save time.

Regarding claims 5 and 11, the particulars of the device as claimed in the body of the claim do not support the preamble. In other words, there are no structural limitations, such as a drill bit, or teeth in a saw, that are used to cut bone. Therefore, all that is required to meet the functional limitations of the claim is that the device be *capable* of performing the requisite functional limitations. Although it would not be very effective, Palm's clippers *could* in fact be used to cut bone.

Claims 2, 3, 6 and 12 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 3,550,280 to Palm in view of U.S. Patent No. 4,823,244 to Alaybayoglu et al. and further in view of admitted prior art. The manner in which the references meet the claim limitations has been set forth. However, Palm (or Alaybayoglu) fails to disclose the use of a battery pack having "chemistry based upon lithium/manganese

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dioxide.” Nevertheless, Applicants admit on page 10 of the Specification that lithium/manganese dioxide batteries are known to have a long burn time and are standardized batteries. Therefore, their use in a disposable battery pack for a surgical instrument would have been obvious to one of ordinary skill in the art at the time the invention was made because they are standardized batteries, known to have a long burn time.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 3,550,280 to Palm in view of U.S. Patent No. 4,823,244 to Alaybayoglu et al. and further in view of U.S. Patent No. 5,368,954 to Bruns. Palm discloses the use of a round handpiece 16 and a round and oval batter pack 123. The handpiece and battery pack are “closely similar in size and shape.” The external surfaces of the handpiece and battery pack have a continuous external surface as illustrated in Fig. 1.

However, Palm fails to disclose the “battery receiving end of the handpiece, and the attachment end of the battery pack, each ha[ving] a non-circular external cross-sectional configuration.” Nevertheless, it has been held that mere changes in size or shape are within the level of ordinary skill in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the handpiece and battery pack rectangular or any other circular or non-circular shape.

In the alternative, Bruns teaches the use of a rectangular handpiece 2 and battery pack 16, which indicate to a user whether or not the two pieces are aligned upon insertion or removal. The rectangular shape further indicates to a user when sufficient

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relative rotation of the two pieces has been reached to create proper contact alignment. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made Palm's handpiece and battery pack rectangular (and hence non-circular) as taught by Bruns to indicate proper insertion and separation alignment, and proper contact alignment.

The manner in which the limitations of claim 10 read on the prior art have been heretofore described.

Claim 29 is rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 3,550,280 to Palm, in view of U.S. Patent No. 4,823,244 to Alaybayoglu et al., in view of admitted prior art, and in further view of U.S. Patent No. 5,368,954 to Bruns. The handpiece and battery pack have a non-circular external cross-section. (The motivation for a non-circular cross-section is taught by Bruns and may be found in the rejection of claim 9.) The handpiece comprises two ends, an alignment post on the second end, a plurality of circular concentric contacts, and flat ends surfaces 76.

The battery pack 123 is sterile and disposable. (The motivation for a sterile and disposable battery pack is taught by Alaybayoglu and is found in the rejection of claims 1, 4, 5, 7, 8 and 11.) The battery chemistry is based on lithium/manganese dioxide. (See the rejection of claims 2, 3, 6 and 12.) The battery pack and handpiece are secured by rotating the two pieces relative to one another. The attachment end of the battery pack has an opening that receives the handpiece alignment post. The contacts of the battery pack and handpiece mate and are "lockingly and conductively

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interengaged in response to rotating movement.” When locked, they handpiece and battery pack form an “essentially continuous external surface.”

Response to Arguments

Applicants’ arguments dated August 18, 2003 have been considered persuasive. Specifically, Bruns does not disclose that the contacts (themselves) “are adapted to become *lockingly* and conductively *interengaged...in response to rotation of the battery pack relative to the handpiece.*” Therefore, the rejections over Bruns are withdrawn.

Nevertheless, Applicants’ arguments are moot in view of the new grounds of rejection.

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Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Jacob Davis whose telephone number is (703) 305-1232. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Milano can be reached on (703) 308-2496. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.


DJD

November 5, 2003


MICHAEL J. MILANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700